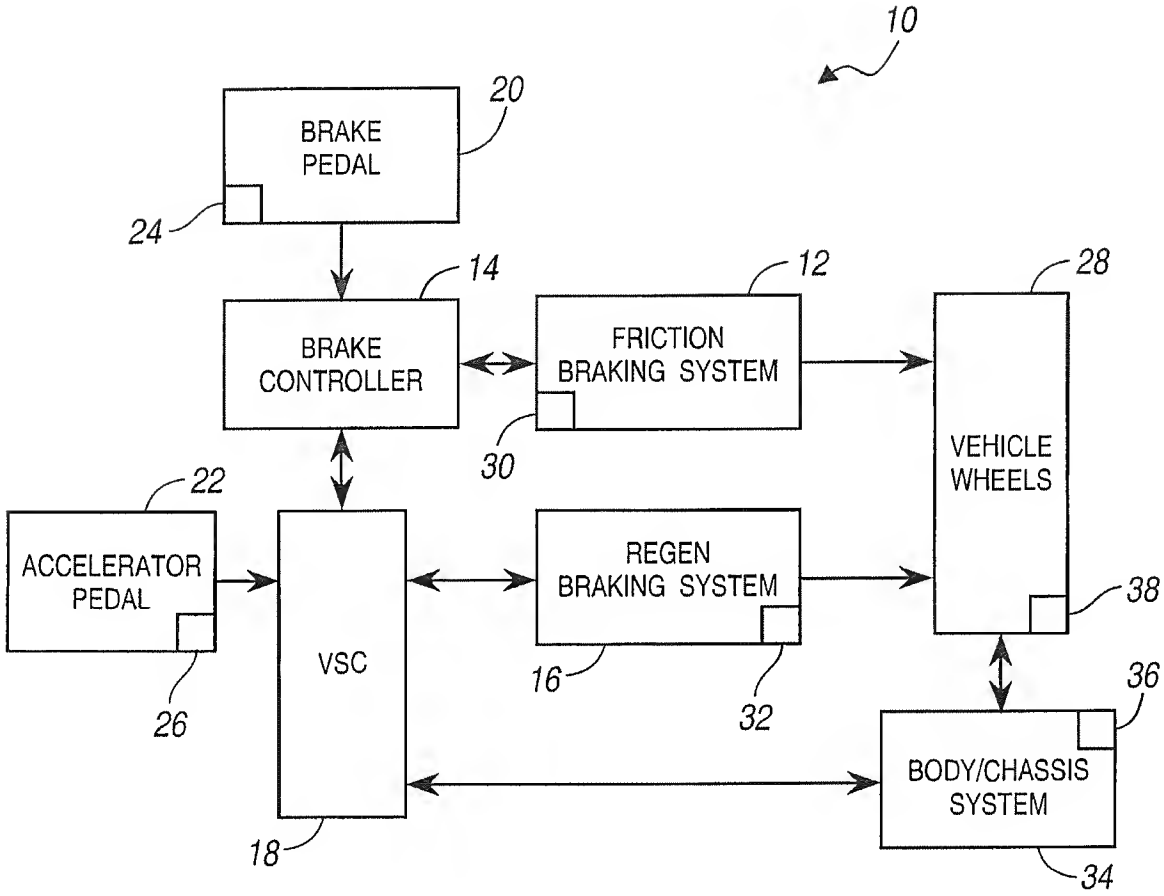
10
BRAKE PEDAL
20
24
BRAKE CONTROLLER
14
FRICTION BRAKING SYSTEM
12
30
VEHICLE WHEELS
28
ACCELERATOR PEDAL
22
26
VSC
REGEN BRAKING SYSTEM
16
32
38
36
BODY/CHASSIS SYSTEM
34
18

FIGURE 1

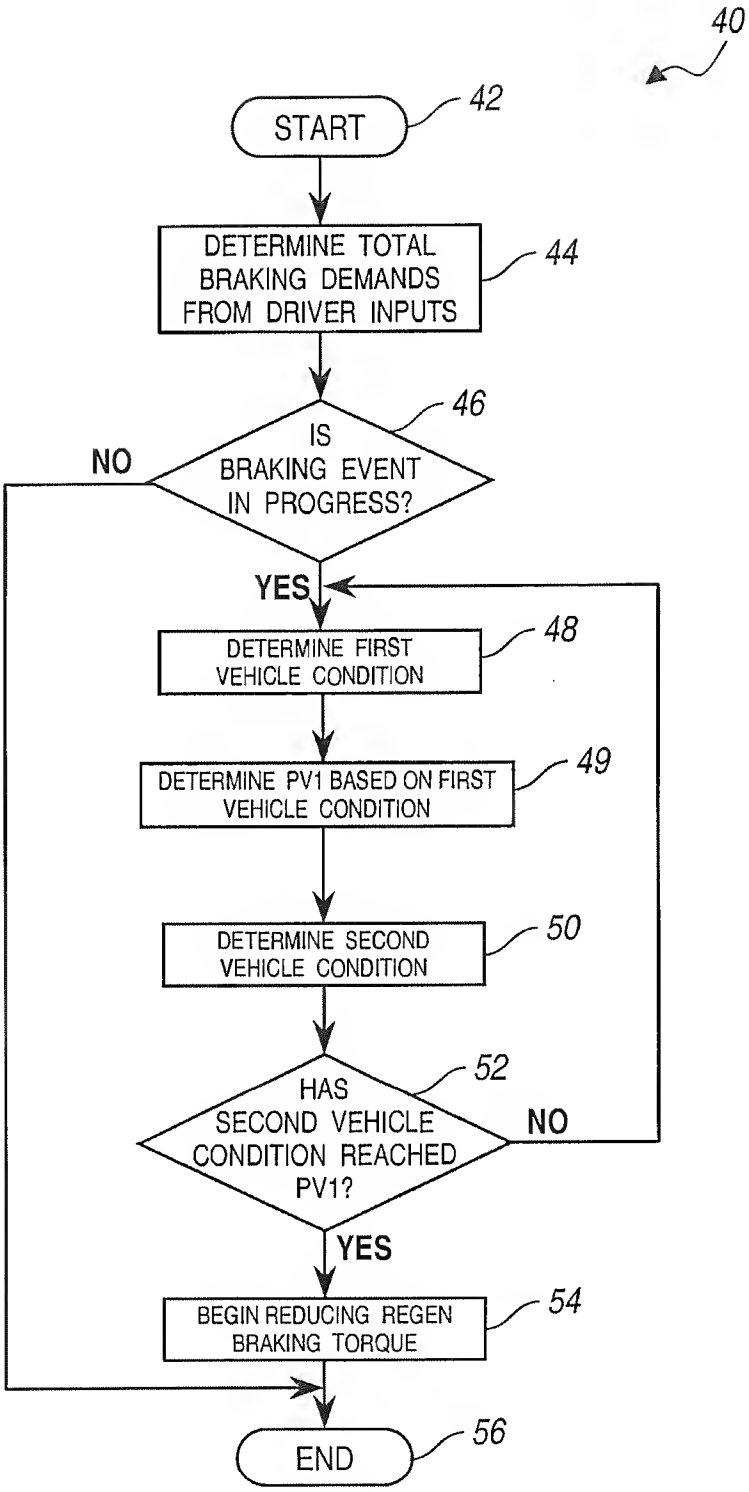
40
START
42
DETERMINE TOTAL BRAKING DEMANDS FROM DRIVER INPUTS
44
IS BRAKING EVENT IN PROGRESS?
46
NO
YES
DETERMINE FIRST VEHICLE CONDITION
48
DETERMINE PV1 BASED ON FIRST VEHICLE CONDITION
49
DETERMINE SECOND VEHICLE CONDITION
50
HAS SECOND VEHICLE CONDITION REACHED PV1?
52
NO
YES
BEGIN REDUCING REGEN BRAKING TORQUE
54
END
56

FIGURE 2

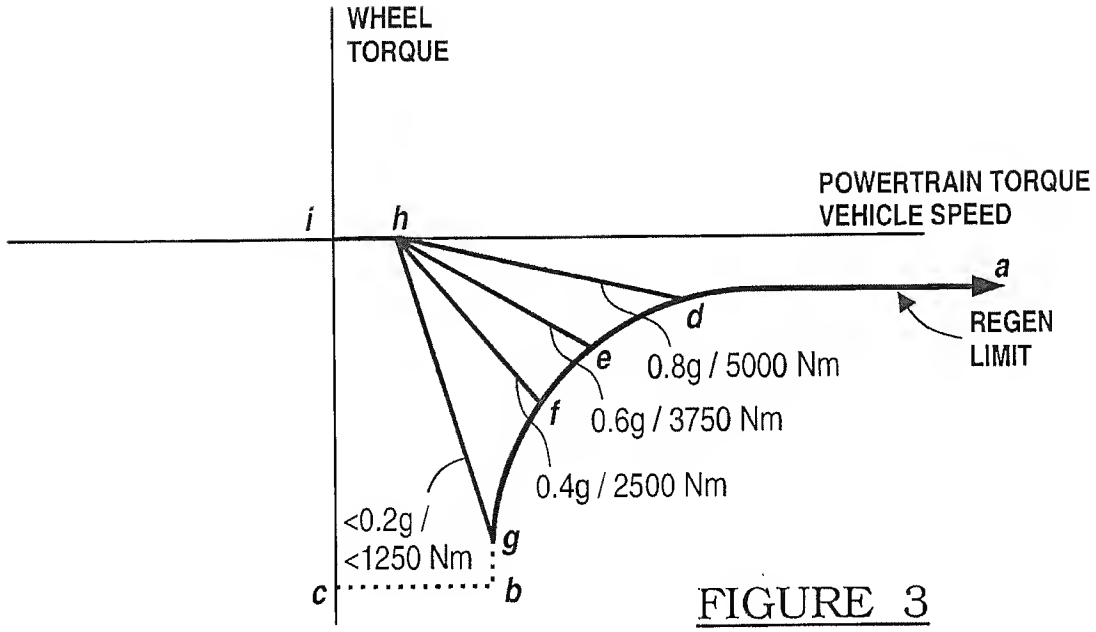

FIGURE 3

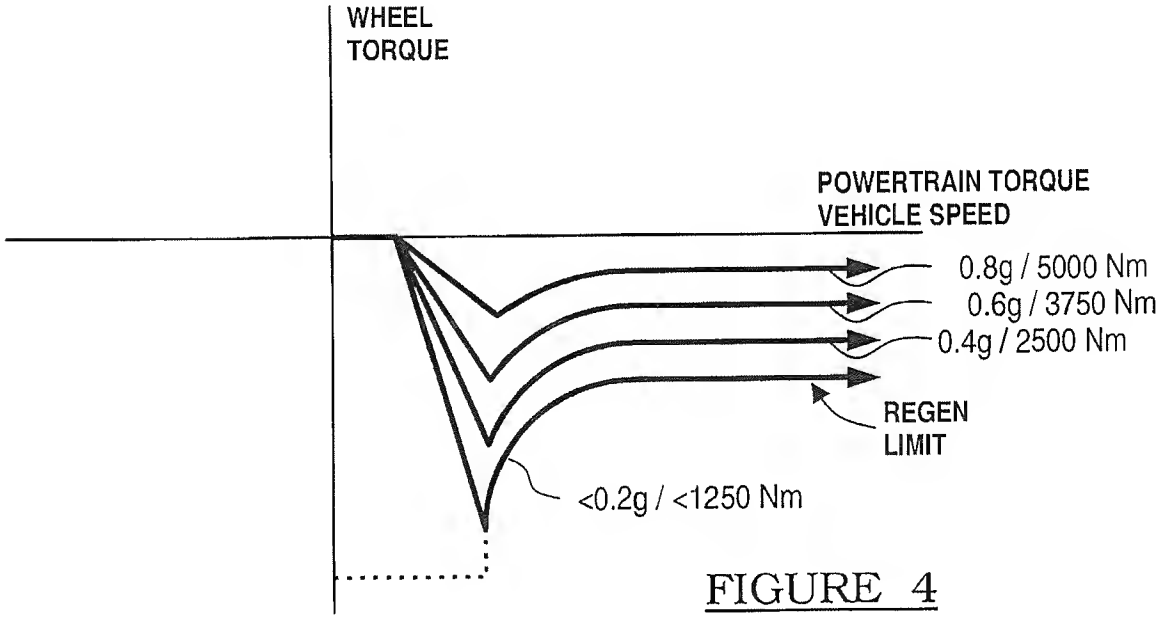

FIGURE 4

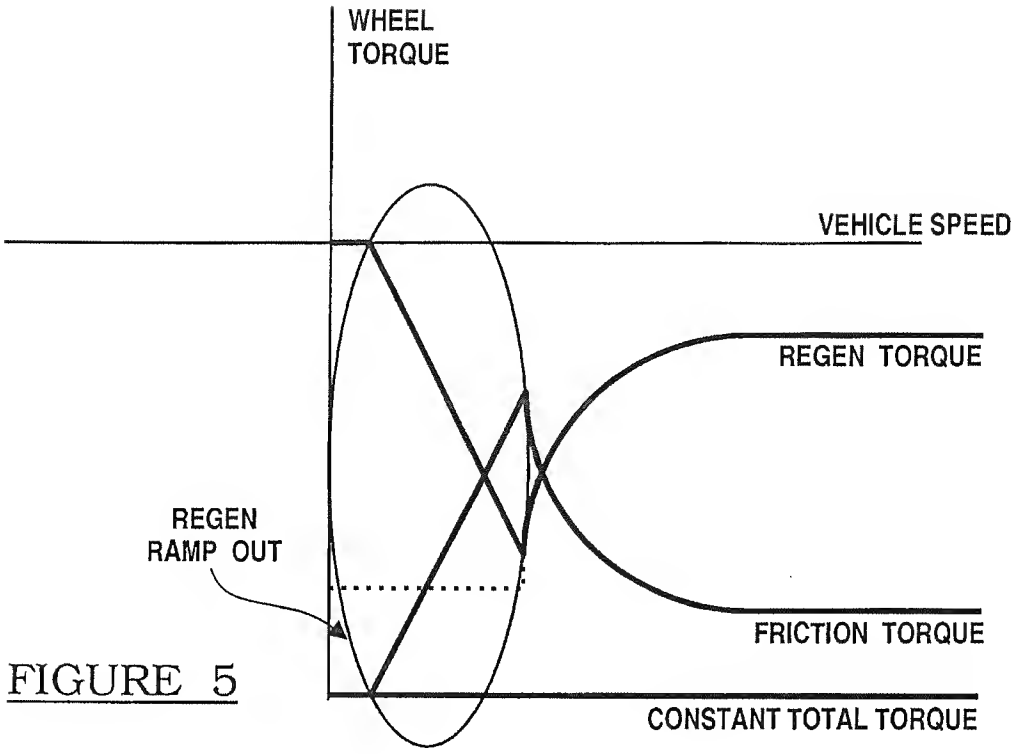

FIGURE 5

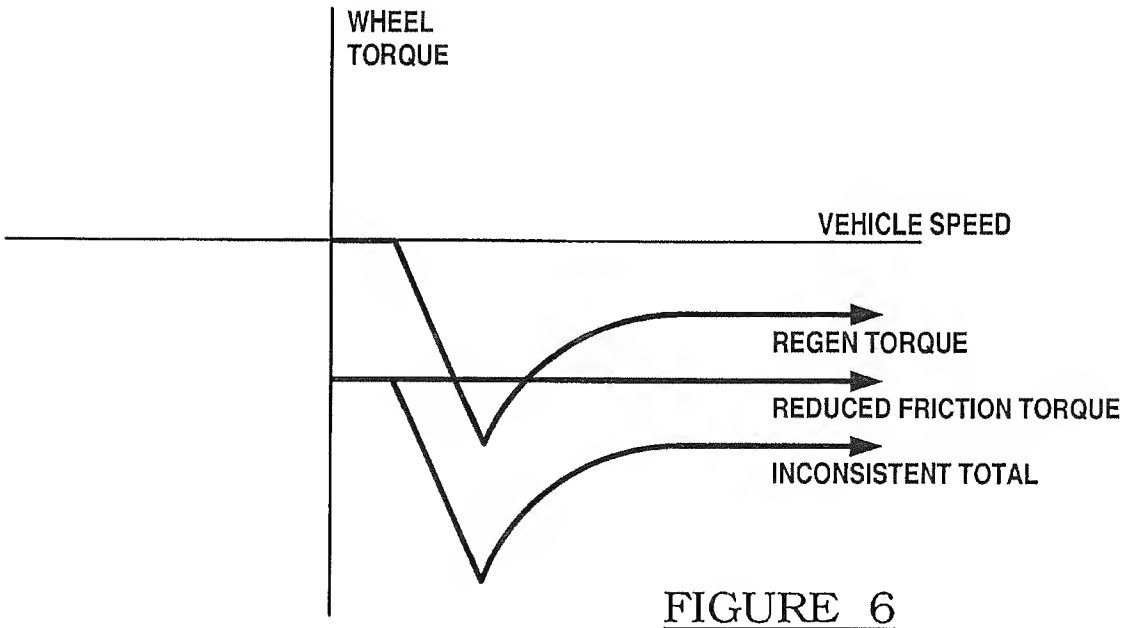

FIGURE 6

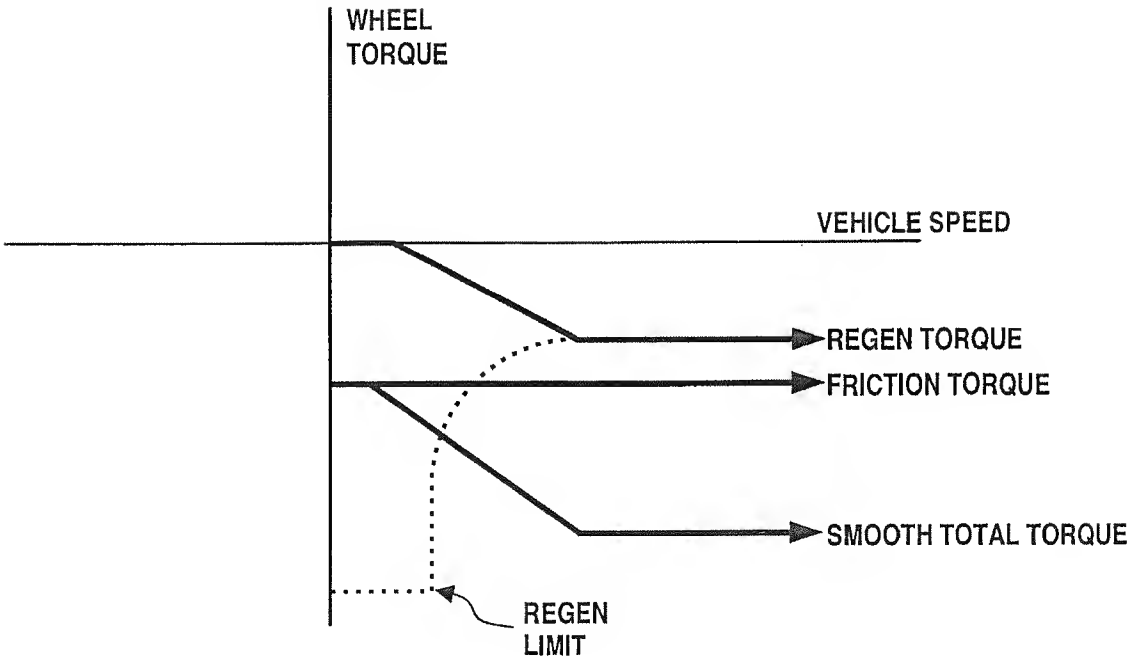
WHEEL
TORQUE
VEHICLE SPEED
REGEN TORQUE
FRICTION TORQUE
SMOOTH TOTAL TORQUE
REGEN
LIMIT

FIGURE 7